



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,610	03/26/2001	Joergen Brosow	LZ-44PCT	1618

7590                    07/09/2003

Friedrich Kueffner  
317 MADISON AVENUE  
SUITE 910  
New York, NY 10017

[REDACTED] EXAMINER

KIM, AHSHIK

[REDACTED] ART UNIT      [REDACTED] PAPER NUMBER

2876

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/744,610	BROSOW, JOERGEN	
	Examiner Ahshik Kim	Art Unit 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 03/05/03 (Amendment).
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 31-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 31-50 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a)  The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Amendment*

1. Receipt is acknowledged of the amendment filed on March 5, 2003. In the amendment,  
5 claims 1-21 were canceled and Applicant added new claims numbered from 22-41. However,  
the original application presented claims 1-30. In the preliminary amendment filed on January  
26, 2002, Applicant amended claims 1-21, and stated that claims 1-21 are in the application in  
the remarks section. Although both Applicant and Examiner would acknowledge that those claims  
22-30 are not in the examination, they are not officially canceled. Accordingly, claims 22-41 in  
10 the outstanding amendment are renumbered 31-50. **In response to this Office Action, Applicant**  
**is required to cancel claims 22-30. Currently, claims 31-50 remain for examination.**

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
15 obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in  
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are  
such that the subject matter as a whole would have been obvious at the time the invention was made to a person  
having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the  
20 manner in which the invention was made.

2. Claims 31-40, and 42-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over  
Wolpert et al. (US 6,255,948) in view of Szewczykowski (US 6,039,249).

Re claims 31-33, 35-38, 40, 43, 47, 48, and 50, Wolpert teaches a safety/security paper  
25 12 (see abstract) comprising a security strip 10 extending along short side of the paper (see figure  
1, col. 4, lines 37+; col. 5, lines 5+). The embodiment of safety paper can include banknotes,

currencies, checks, passports and other safety/security papers (col. 4, lines 50+). As shown in figures 2-3C, the security paper is comprised of a polymeric carrier layer 14 and a metallic substrate 20 (col. 5, lines 22+), and an additional coating layer or laminate 24 can also be contemplated (col. 6, lines 28+).

- 5 Wolpert fails to specifically teach or fairly suggest that the security structure is an electronic circuit communicating with host machine in contactless manner.

Szewczykowski teaches a safety/security paper in the form of a negotiable instrument comprising an RF-ID tag (see abstract; col. 2, lines 65+) to provide authentication function and therefore thwart counterfeiting effort. RF-ID tag contains one or more integrated circuits pressed, 10 stamped or etched to form a thin layer, and when communicating with the host, the tag/antenna receives power and signal from the host and transmits response to the host. It is also disclosed in Szewczykowski (see abstract) that the RF-ID tag can be used alternatively or in addition to a magnetic strip on the instrument.

- In view of Szewczykowski's teaching, it would have been obvious to an ordinary skill 15 in the art at the time the invention was made to employ well-known radio frequency identification (RF-ID) tag to the teachings of Wolpert in order to improve data storage capacity and add remote I/O capability. RF-ID tag, in general, provides more data storage area for information to be stored and retrieved compared to a magnetic strip. Moreover, data stored in RF-ID tag can be remotely read and updated by the reader, and the tag on the instrument 20 functions as an antenna sending and receiving the data. Such contactless I/O provides significant advantage in checking authenticity of an item since one does not have to take the item to the reader, and un-authorized person(s) may not aware that the items are being checked.

Accordingly, such modification would have been an obvious extension considered by one ordinary skill in the art, and therefore an obvious expedient.

Re claim 34, as shown in figure 5, the reader reads characteristic information from the device 10, and compares it against the predetermined pattern and determines authenticity (col. 7, 5 lines 55+).

Re claim 39, the security feature is embedded between carrier layer and a covering layer (see figure 3A).

Re claim 42, although Wolpert is silent about expansion coefficient of various materials make up the security paper, it would have been obvious to one of ordinary skill in the art to use 10 materials sharing common characteristics/parameters, as it would only make common industrial sense for the pattern and paper layer to have similar expansive properties, so as to prevent the pattern from separating from the paper layer during a heating process. For example, if the currency were in a very hot environment, without similar expansive properties, the paper layer may expand at a faster rate than the pattern, causing the pattern to be damaged or “fall off” the 15 currency.

Re claims 44-46, Wolpert further discloses that one or more security devices 10 can be installed in various locations, and the paper can be read in all directions (i.e., upside down or right side up, etc.) suggesting that location information is taken into account in identifying the security devices 10.

20 Re claim 49, although not explicitly suggested, location of security device 10 can be considered a design variation element in that some would choose to locate them in easily visible area of the paper, as a warning and try to prevent any unauthorized acts. Some may have them in

obscure location in the paper, and put emphasis on catching people who are willing to tamper papers. Accordingly, it is Examiner's view that location of the device alone, since other elements are already taught by Wolpert in view of Szewczykowski, would not be patentable..

- 5 3. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wolpert et al. (US 6,255,948) as modified by Szewczykowski (US 6,039,249) as applied to claim 40 above, and further in view of Weinberger (US 4,472,627, as cited by applicant). The teachings of Wolpert as modified by Szewczykowski have been discussed above.

Wolpert/Szewczykowski fail to specifically teach or fairly suggest of utilizing a

- 10 photovoltaic surface area generating power for providing power to component parts of the paper.

Weinberger teaches a safety paper (currency) with a structure making possible a contactless checking of an authenticity feature, the structure comprises a photovoltaic surface area, whose light reflection and/or transmission properties can be controlled as function of the voltage supplied to the surface. The structure has a solar cell surface area 26 that serves as an 15 energy supply from light applied to the area. The light applied may change the color of the structure surface area (figure 1-4, col. 2, lines 34-64, and col. 3, line 32 – col. 4, line 15).

- In view of Weinberger's teaching, it would have been obvious to an ordinary skill in the art at the time the invention was made to employ well-known photovoltaic power source to the 20 teachings of Wolpert/Szewczykowski in order to self-generate power for the memory if constant power is required for the memory. As is known in the art, some memory cells require constant power supply to retain information stored in the memory. Even some RF-ID tags are equipped with own power source rather than relying on host machine to provide power to the tag.

Accordingly, implementing self-supplying power source as taught by Weinberger is an obvious extension and well within the ordinary skill in the art.

5

***Response to Remarks***

4. Upon further review of Baldi Application (EP 905657A), and Applicant's argument stated in remarks section, previous rejection relied on Baldi reference is withdrawn.

Accordingly, this Office Action is non-final.

10

***Conclusion***

I. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Harbaugh (US 5,535,871); Crane (US 4,980,569); Yap et al. (US 6,111,506); Behm et al. (US 5,599,046); Mosher, Jr. et al. (US 5,979,941); Koza et al. (US 5,112,050) disclose various security papers comprising authentication scheme.

II. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Ahshik Kim* whose telephone number is (703)305-5203 . The examiner can normally be reached between the hours of 6:00AM to 3:00PM Monday thru Friday.

20 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (703) 305-3503. The fax number directly to the Examiner is (703) 746-4782. The fax phone number for this Group is (703)308-7722, (703)308-7724, or (703)308-7382.

25 Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [ahshik.kim@uspto.gov].

30 All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Art Unit: 2876

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

5

Ahshik Kim  
Patent Examiner  
Art Unit 2876  
June 27, 2003

10

MICHAEL G. LEE  
SUPPLY/DIVISION PATENT EXAMINER  
TECHNOLOGY CENTER 2800